IN THE CLAIMS:

The following is a listing of the pending claims.

1. (Previously Presented) A method for header compression, comprising:

communicating header information;

comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items;

determining a type of classification based on said comparing of the items of the lists; and

using the determined type of classification to control the communication and compression of the information.

2. (Original) The method of claim 1, wherein said comparing determines a difference between said current item list and said reference item list.

3. (Previously Presented) The method of claim 2, wherein the communication of the information further comprises sending information regarding said difference from a first entity to a second entity.

4. (Original) The method of claim 3, further comprising encoding said information regarding said difference prior to sending said information from said first entity to said second entity.

5.   (Original)   The method of claim 4, wherein encoding said information comprises encoding information regarding a position of a newly added item to said reference item list.

6.   (Original)   The method of claim 4, wherein encoding said information comprises encoding information regarding which item in said reference item list is not in said current item list.

7.   (Original)   The method of claim 4, wherein encoding said information comprises encoding information regarding content of at least one item in said reference item list.

8.   (Previously Presented)   The method of claim 4, wherein encoding said information comprises a combination of at least two of the following: encoding information regarding a position of a newly added item to said reference item list; encoding information regarding which item in said reference item list is not in said current item list; and encoding information regarding content of at least one item in said reference item list.

9.　(Previously Presented)　The method of claim 1, wherein the communicating information further comprises sending a compressed list from a first entity to a second entity.

10.　(Original)　The method of claim 9, wherein said compressed list includes information regarding a difference between said current item list and said reference item list.

11.　(Original)　The method of claim 10, wherein said difference is encoded within said compressed list based on said determined type of classification.

12.　(Original)　The method of claim 11, wherein said information further comprises a type of encoding.

13.　(Previously Presented)　The method of claim 12, wherein said type of encoding comprises one of: an insertion encoding scheme, a removal encoding scheme and a content change encoding scheme.

14.　(Original)　The method of claim 1, further comprising sending information regarding a difference between an item in said current item list and a corresponding item in said reference item list.

15.   (Original) The method of claim 1, wherein said type of classification is based on at least one of: whether an item in said reference item list is in said current item list, whether said item is in said reference item list and whether contents of said item in said current item list are the same as contents of said item in said reference item list.

16.   (Cancelled)

17.   (Previously Presented) The method of claim 1, wherein the communicating further comprises sending said reference item list from a first entity to a second entity.

18.   (Cancelled)

19.   (Previously Presented) A method for header compression, comprising:

classifying at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items;

based upon the classifying of the at least one item of the current list, forming a compressed list including said at least one item;

transmitting said compressed list as a compressed header; and

determining a type of classification based on said comparing.

20.   (Cancelled)

21.   (Previously Presented) The method of claim 19, wherein said comparing determines a difference between said current item list and said reference item list.

22.   (Previously Presented) The method of claim 21, wherein the transmitting the compressed list further comprises transmitting information regarding said difference from a first entity to a second entity.

23.   (Original) The method of claim 22, further comprising encoding said information regarding said difference within said compressed list.

24.   (Original) The method of claim 19, wherein said compressed list includes information regarding a difference between a current item list and a reference item list.

25.   (Original) The method of claim 24, further comprising encoding said information regarding said difference within said compressed list based on said classifying.

26.   (Original) The method of claim 25, wherein encoding said information comprises encoding information regarding a position of a newly added item to said reference item list.

27.　(Original)　The method of claim 25, wherein encoding said information comprises encoding information regarding which item in said reference item list is not in said current item list.

28.　(Original)　The method of claim 25, wherein encoding said information comprises information regarding content of at least one item in said reference item list.

29.　(Original)　The method of claim 25, wherein said information comprises a type of encoding.

30.　(Previously Presented)　The method of claim 19, wherein the sending the compressed list further comprises sending said reference item list from a first entity to a second entity.

31.　(Cancelled)

32.　(Previously Presented)　An apparatus, comprising:

a processor configured to compare a current item list containing a plurality of current items with a reference item list containing a plurality of reference items, to determine a type of classification based on said comparing of the items of the lists, and to communicate compressed information based upon the determined type of classification.

33.   (Previously Presented) The apparatus of claim 32, wherein said processor is configured to determine a difference between said current item list and said reference item list.

34.   (Previously Presented) The apparatus of claim 33, further comprising a transmitter configured to transmit information regarding said difference from said apparatus to another entity.

35.   (Previously Presented) The apparatus of claim 34, further comprising an encoder configured to encode said information regarding said difference prior to transmitting said information from said apparatus to said another entity.

36.   (Previously Presented) The apparatus of claim 32, further comprising a transmitter configured to transmit a compressed list from said apparatus to another entity.

37.   (Previously Presented)   The apparatus of claim 36, wherein said compressed list includes information regarding a difference between said current item list and said reference item list.

38.   (Previously Presented) The apparatus of claim 37, further comprising an encoder configured to encode said difference within said compressed list based on said determined type of classification.

39.   (Previously Presented) The apparatus of claim 32, wherein said processor is configured to determine a difference between an item in said current item list and a corresponding item in said reference item list, and said apparatus further comprises a transmitter configured to transmit information regarding said difference from said apparatus to another entity.

40.   (Previously Presented) An apparatus, comprising:

a processor configured to classify at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items and based upon the classifying of the at least one item of the current list to form a compressed list including said at least one item; and

a transmitter configured to transmit said compressed list,

wherein said processor is configured to determine a type of classification based on said comparing.

41.   (Cancelled)

42.   (Previously Presented) The apparatus of claim 40, wherein said processor is configured to determine a difference between said current item list and said reference item list.

43.   (Previously Presented) The apparatus of claim 42, wherein said transmitter is configured to transmit information regarding said difference between said current item list and said reference item list from said apparatus to another entity.

44.   (Previously Presented) The apparatus of claim 43, further comprising an encoder configured to encode said information regarding said difference within said compressed list.

45.   (Previously Presented) The apparatus of claim 44, wherein said encoder is configured to encode information regarding a position of a newly added item to said reference item list.

46.   (Previously Presented) The apparatus of claim 44, wherein said encoder is configured to encode information regarding which item in said reference item list is not in said current item list.

47.   (Previously Presented) The apparatus of claim 44, wherein said encoder is configured to encode information regarding content of at least one item in said reference item list.

48.   (Previously Presented) The apparatus of claim 44, wherein said encoder is configured to perform a combination of at least two of the following: encoding

information regarding a position of a newly added item to said reference item list; encoding information regarding which item in said reference item list is not in said current item list; and encoding information regarding content of at least one item in said reference item list.

49.   (Previously Presented)   The apparatus of claim 40, wherein said compressed list includes information regarding a difference between a current item list and a reference item list.

50.   (Previously Presented) The apparatus of claim 49, wherein said difference is encoded within said compressed list based on said classifying.

51.   (Previously Presented) An apparatus, comprising:

comparing means for comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items;

determining means for determining a type of classification based on a comparing of the items of the lists; and

communicating means for communicating the compressed information based upon a determined type of classification.

52. (Previously Presented) An apparatus, comprising:

classifying means for classifying at least one item of a current list containing a plurality of items;

comparing means for comparing the current list with a reference list containing a plurality of items;

forming means for, based upon the classifying of the at least one item of the current list, forming a compressed list including the at least one item; and

means for transmitting said compressed list;

wherein said classifying means is configured to classify based on a comparing of the current list with the reference list.

53. (Previously Presented) A method for header decompression, comprising:

receiving header information generated by a process in which a current item list containing a plurality of current items is compared with a reference item list containing a plurality of reference items, a type of classification is determined based on said comparing of the items of the lists, and the determined type of classification to control the communication and compression of the information; and

decompressing the received header information.

54. (Previously Presented) The method of claim 53, wherein the received header information comprises information sent from a first entity to a second entity.

55.   (Previously Presented) The method of claim 53, further comprising:

receiving said reference item list.

56.   (Previously Presented)   The method of claim 55, wherein said decompressing is performed using said received reference item list as a reference.

57.   (Previously Presented) A method for header decompression, comprising:

receiving header information generated by a process in which at least one item of a current list containing a plurality of items is classified by comparing the current list with a reference list containing a plurality of items, and, based upon the classifying of the at least one item of the current list, a compressed list including said at least one item is formed, wherein said compressed list is transmitted as a compressed header; and

decompressing the received header information.

58.   (Previously Presented) The method of claim 57, further comprising:

receiving said reference item list.

59.   (Previously Presented)   The method of claim 58, wherein said decompressing is performed using said received reference item list as a reference.

60.   (Previously Presented)   An apparatus for header decompression, comprising:

a receiver configured to receive header information generated by a process in which a current item list containing a plurality of current items is compared with a reference item list containing a plurality of reference items, a type of classification is determined based on said comparing of the items of the lists, and the determined type of classification to control the communication and compression of the information; and

a decompressor configured to decompress the received header information.

61.   (Previously Presented)   The apparatus of claim 60, wherein the received header information comprises information sent from a first entity to a second entity.

62.   (Previously Presented)   The apparatus of claim 60, wherein the receiver is further configured to receive said reference item list.

63.   (Previously Presented)   The apparatus of claim 62, wherein said decompressor is configured to use said received reference item list as a reference.

64.   (Previously Presented)   An apparatus for header decompression, comprising:

a receiver configured to receive header information generated by a process in which at least one item of a current list containing a plurality of items is classified by comparing the current list with a reference list containing a plurality of items, and, based upon the classifying of the at least one item of the current list, a compressed list including

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said at least one item is formed, wherein said compressed list is transmitted as a compressed header; and

a decompressor configured to decompress the received header information.

65. (Previously Presented) The apparatus of claim 64, wherein said receiver is further configured to receive said reference item list.

66. (Previously Presented) The apparatus of claim 65, wherein said decompressor is configured to use said received reference item list as a reference.

67. (Previously Presented) An apparatus for header decompression, comprising:

receiving means for receiving header information generated by a process in which a current item list containing a plurality of current items is compared with a reference item list containing a plurality of reference items, a type of classification is determined based on said comparing of the items of the lists, and the determined type of classification to control the communication and compression of the information; and

decompression means for decompressing the received header information.

68. (Previously Presented) An apparatus for header decompression, comprising:

receiving means for receiving header information generated by a process in which at least one item of a current list containing a plurality of items is classified by comparing the current list with a reference list containing a plurality of items, and, based upon the classifying of the at least one item of the current list, a compressed list including said at least one item is formed, wherein said compressed list is transmitted as a compressed header; and

decompression means for decompressing the received header information.

69. (Previously Presented) A computer-readable medium encoded with instructions that, when executed on a computer, perform a process, the process comprising:

communicating header information;

comparing a current item list containing a plurality of current items with a reference item list containing a plurality of reference items;

determining a type of classification based on said comparing of the items of the lists; and

using the determined type of classification to control the communication and compression of the information.

70. (Previously Presented) A computer-readable medium encoded with instructions that, when executed on a computer, perform a process, the process comprising:

classifying at least one item of a current list containing a plurality of items by comparing the current list with a reference list containing a plurality of items;

based upon the classifying of the at least one item of the current list, forming a compressed list including said at least one item;

transmitting said compressed list as a compressed header; and

determining a type of classification based on said comparing.

71.   (Previously Presented)   A computer-readable medium encoded with instructions that, when executed on a computer, perform a process, the process comprising:

receiving header information generated by a process in which a current item list containing a plurality of current items is compared with a reference item list containing a plurality of reference items, a type of classification is determined based on said comparing of the items of the lists, and the determined type of classification to control the communication and compression of the information; and

decompressing the received header information.

72.   (Previously Presented)   A computer-readable medium encoded with instructions that, when executed on a computer, perform a process, the process comprising:

receiving header information generated by a process in which at least one item of a current list containing a plurality of items is classified by comparing the current list with

a reference list containing a plurality of items, and, based upon the classifying of the at least one item of the current list, a compressed list including said at least one item is formed, wherein said compressed list is transmitted as a compressed header; and

decompressing the received header information.